1983 Drug Store and Hospital Drug Purchases:

A Comparison of Canada and the United States

by

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INTRODUCTION

This study estimates the impact of compulsory licensing on the costs of drugs purchased by drug stores and hospitals in 1983. The estimate is based on a comparison of expenditures for specific drugs purchased in the United States and Canada.

The report has four sections;

- a methodological description,
- an analysis of the 1983 results,
- a comparison of the 1983 results with the results of a similar study using 1982 data,
- a comparison of 1983 drug store and hospital results with 1983 data for drug stores purchases only.

METHODOLOGY

The methodology follows that used in two similar studies which are also the sources of the data used in the comparisons[1].

Two sets of drugs were selected: drugs subject to generic competition through the compulsory licensing provision[2] (termed multiple source drugs) and drugs for which there was no generic competition in Canada (termed single source drugs). In selecting drugs for the latter category, an attempt was made to include the largest selling prescription medicines in Canada based on drug store and hospital purchases.

Firms selling generic products are not usually multinational in character and are not integrated. Most significantly, generic drug companies use price competition as their major marketing strategy. Since this study is concerned with price comparisons, the distinction is drawn between drug makers which compete primarily on the basis of price versus brand name companies which do not.

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1 DRUG COST DIFFERENTIAL BETWEEN CANADA AND U.S.A., Bureau of Policy Coordination, Consumer and Corporate Affairs Canada, May 1983.

A COMPARISON OF PHARMACY DRUG COSTS IN CANADA AND THE UNITED STATES FOR SELECTED YEARS, Bureau of Policy Coordination, Consumer and Corporate Affairs Canada, January 1985.

2 Drugs in this category are known to have generic competition. At least one manufacturer of a generic substitute received a compulsory licence.

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Differences in costs for drugs were determined in the following way. Where all the dosage forms/strengths[3] of a particular drug were available in both jurisdictions, the difference between acquisition costs in the U.S. and Canada were multiplied by the quantities sold in Canada. This was done for each dosage form/strength and the differences aggregated for each drug. (Canadian sales included sales by both brand name and generic drug manufacturers.)

In cases where dosage forms/strengths were not common to both countries, the number of units sold were converted into a common weight (kilograms). Average costs (weighted by sales of dosage forms/strengths) were calculated for each country and the difference multiplied by the Canadian sales. (The results for each drug are provided in the appendices. (Appendix I at $1.00 U.S. = $1.20 Canada, Appendix II at $1.00 U.S. = $1.30 Canada.)

The following two comparisons result;

- the aggregate difference for single source drugs,

- the aggregate difference for multiple source drugs.

Cost differences are measured in dollars and as a proportion of the total sales of each category.

The impact of compulsory licensing is the difference between the U.S. and Canadian costs for multiple source drugs adjusted (reduced) to allow for the difference in single source drugs[4]. This assumes that differences in the price of multiple source drugs result from competitive pressure and not because of any special characteristics of the drugs in the category. In the absence of compulsory licensing, it is assumed that on average, these drugs would exhibit the same cost pattern as the sample of single source drugs.

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3 Drugs are marketed in tablets, capsules, injectables, solutions, ointments, etc. and in various concentrations of active ingredients. The term "dosage forms/strengths" refers to the entire array of forms in which a drug is sold.

4 In the actual calculation the aggregrate U.S. cost of multiple source drugs is reduced by the ratio of Canadian to U.S. costs of single source drugs. The difference between this figure and the actual Canadian cost of multiple source drugs is the impact of compulsory licensing.

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There was a dramatic change in U.S./Canada exchange rates between 1982 and 1983 which would increase the apparent U.S. cost (after conversion to Canada currency) even if actual selling prices were unchanged. This affects the comparison of multiple source and single source drugs, although it does not affect the estimated impact of compulsory licensing. Figures used in the comparison of 1982 and 1983 results were based on 1982 exchange rates.

All data, except sales of generic licenced drugs, are from IMS (Intercontinental Medical Services), a private survey firm. Data for sales of licenced generic drugs were from a survey of manufacturers conducted by Consumer and Corporate Affairs.

ANALYSIS

1983 Drug Store and Hospital Purchases

In 1983, drugstore and hospital purchases of 68 single source drugs sampled in this study cost $307.2M in Canada (see Table A). Purchases in the U.S. of the same quantity of drugs would have cost an additional $70.5M or 23 percent (assuming an exchange rate of $1.30)[5].

The 32 drugs under compulsory licensing in 1983 cost $216M in Canada but would have cost an additional $308.7M or 143 percent if purchased in the United States. Assuming that the drugs under compulsory licensing would have exhibited the same cost pattern as shown for single source drugs, the estimated impact of compulsory licensing would have amounted to 98 percent of the actual value of sales of the compulsory licenced drugs or $210.8M. That is, without compulsory licensing, purchases of these 32 drugs would have cost Canadian consumers almost $211M more than they actually did.

Comparison of 1982 and 1983 Findings

In this section the 1983 figures are based on an assumed exchange rate of $1.20 Canadian equalling $1.00 U.S. The actual exchange rate was roughly $1.30 in 1983 but the use of this rate would distort the year-to-year comparison.

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5 See Table A for results using a lower exchange rate.

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TABLE A

COMPARISON OF COSTS IN CANADA AND THE UNITED STATES
1983 DRUG STORE AND HOSPITAL PURCHASES

	SINGLE SOURCE	MULTIPLE SOURCE	NET DIFFERENCE[1]
Number of Drugs in the Sample	68	32	
Total Cost of Drugs in Sample[2]	$307.2M	$216.0M	
(Exchange rate: $1.30 CAN = $1.00 U.S.)			
Difference Between Costs in Can. and U.S.	$70.5M	$308.7M	$210.8M
Difference as Percent of Total Cost[3]	23%	143%	98%
(Exchange rate: $1.20 CAN = $1.00 U.S.)			
Difference Between Costs in Can. and U.S.	$41.5M	$268.4M	$210.8M
Difference as Percent of Total Cost[3]	13%	124%	98%

1 Estimated impact of compulsory licensing.

2 Includes brand name and generic sales of sampled drugs.

3 Based on total cost of multiple source drugs.

For single source drugs, the difference between Canadian and U.S. drug costs fell to 13 percent in 1983 from 20 percent in 1982. There were 41 single source drugs included in both the 1982 and 1983 samples and which accounted for over 50 percent of the total sample. The difference for these products was 14 percent in 1983 and 17 percent in 1982. For drugs in the 1983 sample only, the U.S./Canada difference was 12 percent while the drugs only in the 1982 sample it was 23 percent. Therefore, the major source of the variation between the two years was due to the change in the drugs sampled.

For multiple source drugs, the cost difference rose to 124 percent in 1983 from 96 percent in the previous year[6]. This significant increase could be due to the greater usage of lower cost substitutes by provincial government programs. Another factor could be the introduction in late 1982 and early 1983 of additional generic competitors for some of the largest selling drugs. The table below shows the increase in the number of competitors for four of the largest selling drugs. The additional competition may have precipitated the rapid decline in prices.

NUMBER OF GENERIC SUBSTITUTES

	1982	1983
CIMETIDINE	1	3
IBUPROFEN	1	3
NAPROXEN	2	3
PROPRANOLOL	4	6

As a result of the marked increase in the difference for multiple source drugs, the impact of compulsory licensing rose to 98 percent or nearly $211M in 1983 from 64 percent or $122.5M in the previous year.

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6 A sampling error in the 1982 study as well as a change in methodology resulted in an underestimate of the impact of compulsory licensing in that year. The 1982 figure presented here has been adjusted to correct for the changes.

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TABLE B

COMPARISON OF COSTS IN CANADA AND THE UNITED STATES 1982 AND 1983

(Exchange rate: $1.20 CAN = $1.00 U.S.)

	1982	1983
SINGLE SOURCE DRUGS		
Number of Drugs in the Sample	53	68
Total Cost of Drugs in the Sample	$187.2M	$307.2M
Difference Between Costs in Canada and U.S.	$36.5M	$41.5M
Difference as Percent of Total Cost[3]	20%	13%
MULTIPLE SOURCE DRUGS		
Number of Drugs in the Sample	29	32
Total Cost of Drugs in the Sample	$191.3M	$216.0M
Difference Between Costs in Canada and U.S.	$183.6M	$268.4M
Difference as Percent of Total Cost[3]	96%	124%
IMPACT OF COMPULSORY LICENSING	$122.5M	$210.8M
	64%	98%

1 Includes brand name and generic sales of sampled drugs.

2 Percentage is based on total sales of compulsory licenced drugs.

Comparison of Drug Store and Hospital Results[7]

For single source drugs, the difference between U.S. and Canadian costs was 25 percent for drug store purchases and 23 percent for combined drug store and hospital purchases. The reduction in the difference, due to the addition of hospital data, implies that Canadian and U.S. hospital drug costs do not differ as much as the drug store costs.

For multiple source drugs, the difference between U.S. and Canadian costs was 132 percent for drug store purchases and 143 percent for combined drug store and hospital purchases. The larger difference means that the U.S./Canada difference in hospital costs for multiple source drugs is larger than the difference for drug stores.

The impact of compulsory licensing was 85 percent or $170.2M for drug store purchases compared with 98 percent or $210.8M for combined drug store and hospital purchases.

SUMMARY

Based on a comparison of U.S. and Canadian drug costs, compulsory licensing has reduced Canadian costs of drug store and hospital purchases by about $211M (using 1983 exchange rates). These figures represent a marked increase compared to the results of a 1982 study that found the difference to be about $122M in that year.

Drugs for which no generic substitutes were available cost, on average, 23 percent more in the U.S. than in Canada. Although a sharp change in exchange rates makes a year-to-year comparison difficult, the data indicate that the cost difference for single source drugs may have been lower in 1983 then in 1982 (i.e. Canadian costs were closer to U.S. costs in 1983 than in 1982). Most of the decline is due to different drugs used in the comparisons for each year.

A comparison of drug store and combined drug store and hospital purchases indicates that the cost difference for single source drugs purchased by hospitals is less than the difference for drug stores. The difference is greater for multiple source drugs. It can thus be inferred that compulsory licensing has had a disproportionally greater impact on hospital costs than on drug store costs.

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7 Note that the drug store purchases are from IMS while drug store and hospital purchases are from IMS and CCAC surveys.

TABLE C

COMPARISON OF COSTS IN CANADA AND THE UNITED STATES, 1983 DRUG STORE AND HOSPITAL VS DRUG STORE ONLY

	DRUG STORE AND HOSPITAL			DRUG STORE ONLY		
	SINGLE SOURCE	MULTIPLE SOURCE	NET IMPACT[1]	SINGLE SOURCE	MULTIPLE SOURCE	NET IMPACT[1]
Number of Drugs Sampled	68	32		57	32	
Total Cost of Sample[2]	$307.2M	$216.0M		$253.8M	$200.1M	
Difference Between Costs in Canada and the U.S.	$70.5M	$308.7M	$210.8M	$64.2M	$263.9M	$170.4M
Difference as Percent of Total Cost of Sample	23%	143%	98%[3]	25%	132%	85%[3]

1 Estimated impact of compulsory licensing.

2 Includes brand name and generic sales of drugs in the sample.

3 Based on total cost of multiple source drugs.

APPENDIX I

If Exchange Rate is
$1 US = $1.2 Can.

TABLE 1

COST DIFFERENCES ON MULTIPLE SOURCE DRUGS IN CANADA(1)

Generic Drug Name	Using Actual U.S. Selling Prices ($000 Can.)
ALLOPURINOL*	2795
AMITRIPTYLINE HCL*	2880
AMOXICILLIN*	84
AMPICILLIN TRIHYDRATE*	-810
BETAMETHASONE VALERATE*	19321
CEPHALEXIN	10237
CHLORTHALIDONE*	3596
CIMETIDINE (BASE AND HCL)	54159
CLOFIBRATE	1667
CLOXACILLIN SODIUM*	17788
DIAZEPAM	33458
ERYTHROMYCIN ESTOLATE*	2187
ETHAMBUTOL HCL	472
FLUOCINOLONE ACETONIDE*	497
FLUOCINONIDE	341
FLURAZEPAM HCL	6780
FUROSEMIDE*	7030
HYDROCHLOROTHIAZIDE*	433
IBUPROFEN	3519

If Exchange Rate is
$1 US = $1.2 Can.

TABLE 1 (CONTINUED)

COST DIFFERENCES ON MULTIPLE SOURCE DRUGS IN CANADA(1)

Generic Drug Name	Using Actual U.S. Selling Prices ($000 Can.)
INDOMETHACIN	7151
METHYLDOPA	11647
METHYLDOPA/HYDROCHLOROTHIAZIDE	1935
NAPROXEN	15778
OXAZEPAM	16439
PERPHENAZINE	3020
PROPRANOLOL HCL	20131
RIFAMPIN	183
THIORIDAZINE HCL*	6181
TRIAMCINOLONE ACETONIDE*	-463
TRIAMCINOLONE ACETONIDE /NEOMYCIN SULFATE /GRAMICIDIN D /NYSTATIN*	461

If Exchange Rate is
$1 US = $1.2 Can.

TABLE 1 (CONCLUDED)

COST DIFFERENCES ON MULTIPLE SOURCE DRUGS IN CANADA(1)

Generic Drug Name	Using Actual U.S. Selling Prices ($000 Can.)
TRIAMTERENE/HYDROCHLOROTHIAZIDE	11793
TRIMETHOPRIM/SULFAMETHOXAZOLE*	7668

TOTAL DIFFERENCE	268358	69648(2)	198710(3)
TOTAL CANADIAN SALES	216011	61315	154696
COST DIFFERENCE AS % OF CANADIAN SALES	124%	114%	128%
NUMBER OF DRUGS	32	15	17

* Drug with generic competition in the US.

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1. The Table displays the difference between actual Canadian Sales value and actual U.S. price value of Canadian sales on each drug. A negative magnitude means that the drug is sold at a lower price in U.S.A.

2. Aggregate of cost differences for drugs with generic competition in U.S.A.

3. Aggregate of cost differences for drugs with no generic competition in U.S.A.

If Exchange Rate is
$1 US = $1.2 Can.

TABLE 2

COST DIFFERENCES ON SINGLE SOURCE DRUGS IN CANADA(1)

Generic Drug Name	Using Actual U.S. Selling Prices ($000 Can.)
ACYCLOVIR	-248
ALPRAZOLAM	532
AMILORIDE HCL/HYDROCHLOROTHIAZIDE	543
AMOXAPINE	357
BACLOFEN	-232
BLEOMYCIN SULFATE	95
BROMOCRIPTINE MESYLATE	439
CAPTOPRIL	-371
CEFACLOR	729
CEFAMANDOLE NAFATE	519
CHOLESTYRAMIN RESIN	439
CISPLATIN	-618
CLONAZEPAM	108
CLONIDINE HCL	512
CLOTRIMAZOLE	8
CYCLOBENZAPRINE HCL	210
DANAZOL	264

If Exchange Rate is
$1 US = $1.2 Can.

TABLE 2 (CONTINUED)

COST DIFFERENCES ON SINGLE SOURCE DRUGS IN CANADA(1)

Generic Drug Name	Using Actual U.S. Selling Prices ($000 Can.)
DANTROLENE SODIUM	113
DIFLUSINAL	230
DILTIAZEM HCL	-131
DIPHENOXYLATE HCL*	21
DOBUTAMINE HCL	204
DOXEPIN HCL	-437
DOXORUBICIN HCL	274
DOXYLAMINE SUCCINATE/PYRIDOXINE HCL*	438
ETIDRONATE DISODIUM	-107
FENOPROFEN CALCIUM	412
HYDRALAZINE HCL*	-1211
ISOTRETINOINE	-537
ISOXSUPRINE HCL*	-512
LEVODOPA/CARBIDOPA	-323
LOPERAMIDE HCL	-340
LORAZEPAM	14033
MAPROTILINE HCL	208
MAZINDOL	-304

If Exchange Rate is
$1 US = $1.2 Can.

TABLE 2 (CONTINUED)

COST DIFFERENCES ON SINGLE SOURCE DRUGS IN CANADA(1)

Generic Drug Name	Using Actual U.S. Selling Prices ($000 Can.)
METHYPRYLONE	1215
METOCLOPRAMIDE HCL	4246
METOLAZONE	164
METOPROLOL TARTRATE	4527
MICONAZOLE NITRATE	-352
MINOCYCLINE HCL	2270
MINOXIDIL	69
NADOLOL	1424
NIFEDIPINE	-4344
OXYBUTYNIN CL	-61
PANCURONIUM BROMIDE	-335
PINDOLOL	-1670
PIPERACILLIN SODIUM	-358
PIROXICAM	6897
PRAZOSIN HCL	781
RANITIDINE HCL	329
SALBUTAMOL	3651
SILVER SULFADIAZINE	-227
SUCRALFATE	308
SULINDAC	1562

If Exchange Rate is
$1 US = $1.2 Can.

TABLE 2 (CONTINUED)

COST DIFFERENCES ON SINGLE SOURCE DRUGS IN CANADA(1)

Generic Drug Name	Using Actual U.S. Selling Prices ($000 Can.)
TAMOXIFEN CITRATE	-1616
TEMAZEPAM	277
TERBUTALINE SULFATE	130
TIMOLOL MALEATE	387
TIMOLOL MALEATE/ HYDROCHLOROTHIAZIDE	-7
TOBRAMYCIN SULFATE	2174
TOLMETIN SODIUM	461
TRAZODONE HCL	-117
TRIAZOLAM	5454
VALPROIC ACID	-124
VANCOMYCIN HCL	371

If Exchange Rate is
$1 US = $1.2 Can.

TABLE 2 (CONCLUDED)

Generic Drug Name	Using Actual U.S. Selling Prices ($000 Can.)
VERAPAMIL HCL	-1605
ZOMEPIRAC SODIUM	272

TOTAL DIFFERENCE	41470	-1264(2)	42734(3)
TOTAL CANADIAN SALES	307220	11141	296079
COST DIFFERENCE AS % OF CANADIAN SALES	13%	-11%	14%
NUMBER OF DRUGS	68	4	64

* Drug with generic competition in the U.S.

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1. The Table displays the difference between actual Canadian sales value and actual U.S. price value of Canadian sales on each drug. A negative magnitude means that the drug is sold at a lower price in U.S.A.

2. Aggregate of cost differences for drugs with generic competition in U.S.A.

3. Aggregate of cost differences for drugs with no generic competition in U.S.A.

APPENDIX II

If Exchange Rate is
$1 US = $1.3 Can.

TABLE 1

COST DIFFERENCES ON MULTIPLE SOURCE DRUGS IN CANADA(1)

Generic Drug Name	Using Actual U.S. Selling Prices ($000 Can.)
ALLOPURINOL*	3320
AMITRIPTYLINE HCL*	3325
AMOXICILLIN*	1110
AMPICILLIN TRIHYDRATE*	-535
BETAMETHASONE VALERATE*	21412
CEPHALEXIN	11654
CHLORTHALIDONE*	4004
CIMETIDINE (BASE AND HCL)	61439
CLOFIBRATE	1931
CLOXACILLIN SODIUM*	19658
DIAZEPAM	36590
ERYTHROMYCIN ESTOLATE*	2577
ETHAMBUTOL HCL	525
FLUOCINOLONE ACETONIDE*	676
FLUOCINONIDE	636
FLURAZEPAM HCL	7648
FUROSEMIDE*	7932
HYDROCHLOROTHIAZIDE*	702
IBUPROFEN	5229

If Exchange Rate is
$1 US = $1.3 Can.

TABLE 1 (CONTINUED)

COST DIFFERENCES ON MULTIPLE SOURCE DRUGS IN CANADA(1)

Generic Drug Name	Using Actual U.S. Selling Prices ($000 Can.)
INDOMETHACIN	9100
METHYLDOPA	13348
METHYLDOPA/HYDROCHLOROTHIAZIDE	2369
NAPROXEN	19087
OXAZEPAM	18038
PERPHENAZINE	3326
PROPRANOLOL HCL	23500
RIFAMPIN	260
THIORIDAZINE HCL*	6866
TRIAMCINOLONE ACETONIDE*	-371
TRIAMCINOLONE ACETONIDE /NEOMYCIN SULFATE /GRAMICIDIN D /NYSTATIN*	757

If Exchange Rate is
$1 US = $1.3 Can.

TABLE 1 (CONCLUDED)

COST DIFFERENCES ON MULTIPLE SOURCE DRUGS IN CANADA(1)

Generic Drug Name	Using Actual U.S. Selling Prices ($000 Can.)
TRIAMTERENE/HYDROCHLOROTHIAZIDE	13480
TRIMETHOPRIM/SULFAMETHOXAZOLE*	9130

TOTAL DIFFERENCE	308723	80563(2)	228160(3)
TOTAL CANADIAN SALES	216011	61315	154696
COST DIFFERENCE AS % OF CANADIAN SALES	143%	131%	147%
NUMBER OF DRUGS	32	15	17

* Drug with generic competition in the US.

---

1. The Table displays the difference between actual Canadian Sales value and actual U.S. price value of Canadian sales on each drug. A negative magnitude means that the drug is sold at a lower price in U.S.A.

2. Aggregate of cost differences for drugs with generic competition in U.S.A.

3. Aggregate of cost differences for drugs with no generic competition in U.S.A.

If Exchange Rate is
$1 US = $1.3 Can.

TABLE 2

COST DIFFERENCES ON SINGLE SOURCE DRUGS IN CANADA(1)

Generic Drug Name	Using Actual U.S. Selling Prices ($000 Can.)
ACYCLOVIR	-178
ALPRAZOLAM	681
AMILORIDE HCL/HYDROCHLOROTHIAZIDE	1177
AMOXAPINE	472
BACLOFEN	-89
BLEOMYCIN SULFATE	224
BROMOCRIPTINE MESYLATE	691
CAPTOPRIL	3
CEFACLOR	1025
CEFAMANDOLE NAFATE	704
CHOLESTYRAMIN RESIN	567
CISPLATIN	-230
CLONAZEPAM	154
CLONIDINE HCL	846
CLOTRIMAZOLE	445
CYCLOBENZAPRINE HCL	383
DANAZOL	492

If Exchange Rate is
$1 US = $1.3 Can.

TABLE 2 (CONTINUED)

COST DIFFERENCES ON SINGLE SOURCE DRUGS IN CANADA(1)

Generic Drug Name	Using Actual U.S. Selling Prices ($000 Can.)
DANTROLENE SODIUM	210
DIFLUSINAL	476
DILTIAZEM HCL	66
DIPHENOXYLATE HCL*	153
DOBUTAMINE HCL	286
DOXEPIN HCL	23
DOXORUBICIN HCL	859
DOXYLAMINE SUCCINATE/PYRIDOXINE HCL*	532
ETIDRONATE DISODIUM	-80
FENOPROFEN CALCIUM	625
HYDRALAZINE HCL*	-718
ISOTRETINOINE	-287
ISOXSUPRINE HCL*	-408
LEVODOPA/CARBIDOPA	164
LOPERAMIDE HCL	-50
LORAZEPAM	16000
MAPROTILINE HCL	436
MAZINDOL	-228

If Exchange Rate is
$1 US = $1.3 Can.

TABLE 2 (CONTINUED)

COST DIFFERENCES ON SINGLE SOURCE DRUGS IN CANADA(1)

Generic Drug Name	Using Actual U.S. Selling Prices ($000 Can.)
METHYPRYLONE	1382
METOCLOPRAMIDE HCL	4920
METOLAZONE	211
METOPROLOL TARTRATE	6740
MICONAZOLE NITRATE	100
MINOCYCLINE HCL	2878
MINOXIDIL	93
NADOLOL	2110
NIFEDIPINE	-3260
OXYBUTYNIN CL	11
PANCURONIUM BROMIDE	-260
PINDOLOL	-1230
PIPERACILLIN SODIUM	-275
PIROXICAM	9589
PRAZOSIN HCL	1206
RANITIDINE HCL	1118
SALBUTAMOL	6000
SILVER SULFADIAZINE	-100
SUCRALFATE	462
SULINDAC	2350

If Exchange Rate is
$1 US = $1.3 Can.

TABLE 2 (CONTINUED)

COST DIFFERENCES ON SINGLE SOURCE DRUGS IN CANADA(1)

Generic Drug Name	Using Actual U.S. Selling Prices ($000 Can.)
TAMOXIFEN CITRATE	-1199
TEMAZEPAM	342
TERBUTALINE SULFATE	181
TIMOLOL MALEATE	1615
TIMOLOL MALEATE/ HYDROCHLOROTHIAZIDE	9
TOBRAMYCIN SULFATE	2815
TOLMETIN SODIUM	615
TRAZODONE HCL	0
TRIAZOLAM	6819
VALPROIC ACID	125
VANCOMYCIN HCL	543

If Exchange Rate is
$1 US = $1.3 Can.

TABLE 2 (CONCLUDED)

Generic Drug Name	Using Actual U.S. Selling Prices ($000 Can.)
VERAPAMIL HCL	-1213
ZOMEPIRAC SODIUM	405

TOTAL DIFFERENCE	70528	-441(2)	70969(3)
TOTAL CANADIAN SALES	307220	11141	296079
COST DIFFERENCE AS % OF CANADIAN SALES	23%	-4%	24%
NUMBER OF DRUGS	68	4	64

* Drug with generic competition in the U.S.

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1. The Table displays the difference between actual Canadian sales value and actual U.S. price value of Canadian sales on each drug. A negative magnitude means that the drug is sold at a lower price in U.S.A.

2. Aggregate of cost differences for drugs with generic competition in U.S.A.

3. Aggregate of cost differences for drugs with no generic competition in U.S.A.